UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

### NOTICE OF ALLOWANCE AND FEE(S) DUE

45180

7590

11/26/2010

GRIMES & BATTERSBY, LLP 488 MAIN AVENUE Suite 300 NORWALK, CT 06851

EXAMINER					
ABDIN, SHAHEDA A					
ART UNIT PAPER NUMBER					
2620					

DATE MAILED: 11/26/2010

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/532,479	04/22/2005	Wolfgang Tzschoppe	OC005USU	5808

TITLE OF INVENTION: METHOD AND APPARATUS FOR SPATIAL DISPLAY USING A RASTERIZED IMAGING DEVICE AND AN ARRAY OF

FILTER ELEMENTS

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1510	\$300	\$0	\$1810	02/28/2011

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

#### HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

### PART B - FEE(S) TRANSMITTAL

### Complete and send this form, together with applicable fee(s), to: Mail Mail Stop ISSUE FEE

Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450
or Fax (571)-273-2885

opropriate. All further o	correspondence including d below or directed oth	ng the Patent, advance or	ders and notification of	maintenance fees w	ill be 1	mailed to the current	nould be completed where correspondence address as rate "FEE ADDRESS" for
CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address)			Not Fee pap hav	Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission.			
GRIMES & BA 488 MAIN AVE Suite 300				Cert	tificate	of Mailing or Transı	
NORWALK, CT	06851						(Depositor's name)
			_				(Signature)
							(Date)
APPLICATION NO.	FILING DATE		FIRST NAMED INVENTOR	:	ATTO	RNEY DOCKET NO.	CONFIRMATION NO.
10/532,479	04/22/2005	•	Wolfgang Tzschoppe	•		OC005USU	5808
ILTER ELEMENTS			. DISPLAY USING A RA		Ī		
APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE	E FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1510	\$300	\$0		\$1810	02/28/2011
EXAMI	NER	ART UNIT	CLASS-SUBCLASS	]			
ABDIN, SHA	AHEDA A	2629	345-006000	_			
"Fee Address" indic PTO/SB/47; Rev 03-02 Number is required.  ASSIGNEE NAME AN PLEASE NOTE: Unle recordation as set forth	ess an assignee is identi in 37 CFR 3.11. Comp	" Indication form led. Use of a Customer A TO BE PRINTED ON T		vely, le firm (having as a agent) and the name orneys or agents. If a printed.  pe) petent. If an assigner assignment.	membes of up no nam	er a 2ot o e is 3	ocument has been filed for
a. The following fee(s) a  Issue Fee  Publication Fee (No	ate assignee category or	4t permitted)	inted on the patent):  D. Payment of Fee(s): (Plead of the payment of Payment of Payment of Payment of Payment of the Director is hereby	Individual Coase first reapply and rd. Form PTO-2038	orporation y previse atta	on or other private gro  iously paid issue fee s  ched.	
Advance Order - #	of Copies		overpayment, to Depo	osit Account Numbe	ge me i	equired fee(s), any def	extra copy of this form).
_ ~ .	us (from status indicated SMALL ENTITY statu		☐ b. Applicant is no lon	oer claiming SMAI	L ENT	TITY status   See 37 CF	FR 1 27(a)(2)
OTE: The Issue Fee and	Publication Fee (if requ		d from anyone other than				e assignee or other party in
Authorized Signature				Date			
his collection of informa n application. Confidenti ibmitting the completed is form and/or suggestic ox 1450, Alexandria, Vi	rginia 22313-1450. DC	CFR 1.311. The informatic U.S.C. 122 and 37 CFR USPTO. Time will vary rden, should be sent to the ONOT SEND FEES OR (	on is required to obtain or 1.14. This collection is es depending upon the indiversity of the complete that the complete the complete the complete that t	retain a benefit by th timated to take 12 n vidual case. Any co er, U.S. Patent and ' O THIS ADDRESS	ne publ ninutes mment Tradem . SENI	ic which is to file (and to complete, including s on the amount of tin ark Office, U.S. Depa D TO: Commissioner f	by the USPTO to process) g gathering, preparing, and ne you require to complete rtment of Commerce, P.O. or Patents, P.O. Box 1450,

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.



# United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450

P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/532,479	04/22/2005	Wolfgang Tzschoppe	OC005USU	5808
45180 7.	590 11/26/2010		EXAM	INER
GRIMES & BAT	ΓTERSBY, LLP		ABDIN, SH	AHEDA A
488 MAIN AVEN	UE		ART UNIT	PAPER NUMBER
Suite 300 NORWALK, CT 06851			2629 DATE MAILED: 11/26/201	0

### Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 726 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 726 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

	Application No.	Applicant(s)			
	10/532,479	TZSCHOPPE ET AL.			
Notice of Allowability	Examiner	Art Unit			
	SHAHEDA A. ABDIN	J 2629			
The MAILING DATE of this communication appeal claims being allowable, PROSECUTION ON THE MERITS IS herewith (or previously mailed), a Notice of Allowance (PTOL-85) NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RESE	(OR REMAINS) CLOS or other appropriate of IGHTS. This application	SED in this application. If not included ommunication will be mailed in due course. <b>THIS</b>			
1. This communication is responsive to <u>11/05/2010</u> .					
2. ☑ The allowed claim(s) is/are <u>1-27</u> .					
<ul> <li>3.  Acknowledgment is made of a claim for foreign priority ur</li> <li>a)  All b)  Some* c)  None of the:</li> <li>1.  Certified copies of the priority documents have</li> <li>2.  Certified copies of the priority documents have</li> <li>3.  Copies of the certified copies of the priority do</li> <li>International Bureau (PCT Rule 17.2(a)).</li> </ul>	e been received. e been received in App	lication No			
* Certified copies not received:					
Applicant has THREE MONTHS FROM THE "MAILING DATE" noted below. Failure to timely comply will result in ABANDONN THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.					
4. A SUBSTITUTE OATH OR DECLARATION must be subm INFORMAL PATENT APPLICATION (PTO-152) which give					
5. CORRECTED DRAWINGS ( as "replacement sheets") mus	st be submitted.				
(a) including changes required by the Notice of Draftspers	on's Patent Drawing F	Review ( PTO-948) attached			
1) ☐ hereto or 2) ☐ to Paper No./Mail Date					
(b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date					
Identifying indicia such as the application number (see 37 CFR 1 each sheet. Replacement sheet(s) should be labeled as such in t					
<ol> <li>DEPOSIT OF and/or INFORMATION about the depo attached Examiner's comment regarding REQUIREMENT</li> </ol>					
Attachment(s)  1. ☐ Notice of References Cited (PTO-892)  2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)  3. ☐ Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date  4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material	6.  ☐ Interv Pape 7.  ☐ Exam	e of Informal Patent Application few Summary (PTO-413), for No./Mail Date finer's Amendment/Comment finer's Statement of Reasons for Allowance finer's.			
Shaheda A Abdin	/Quan-Zh	•			
Examiner Art Unit: 2629	Superviso	ry Patent Examiner, Art Unit 2629			

Application/Control Number: 10/532,479 Page 2

Art Unit: 2629

### **DETAILED ACTION**

### Allowable Subject Matter

- 2. Claims 1-27 are allowed.
- 3. The following is an Examiner's statement of reasons for allowance:

Regarding independent claims 1, and 27, the most closest prior art of record Doerfel et al. (US 7046271 B2) discloses an arrangement of an imaging device with the picture elements (i.e.  $\alpha_{i,j}$ ) in a raster rows and columns (i.e. i and j) in pixels render bits of partial information from at least three views of the scene (see the abstract and column 4, lines 20-46), and wavelength filter arrays in rows and columns with filter elements (i.e.  $\beta_{pq}$ ) with specified range (i.e. range of visible light, see column 25, lines 40-52).

Kleinberger et al. (US Pub: No: 2002/0030888 A1) discloses a full color flat screen binocular stereoscopic viewing device with color filters and display picture elements (see Fig. 5 and 6, [0182-0183])

Hamagishi (US Patent No: 6337721, **see IDS**) discloses a stereoscopic image display screen containing a group of left eye pixels and group of right eye pixels, comprising filter elements (i.e. lenticular screen 6, Fig. 1).

The reference above singly or combined does not teach the uniquely distinct features of the claimed invention such that the ratio between the areas covered by filter elements transparent to light of specified wavelength range and the total

Application/Control Number: 10/532,479 Page 3

Art Unit: 2629

area of all filter elements, multiplied by the average number of the different views displayed per row of the raster of pixels is greater than 1.

Any comments considered necessary by applicant must be submitted no later than the payment of the issues fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

## Inquiry

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to SHAHEDA A. ABDIN whose telephone number is (571)270-1673. The examiner can normally be reached on Mon - Fri 7:30 am - 5:00 pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Quan-Zhen Wang can be reached on 571-272-3114. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Application/Control Number: 10/532,479 Page 4

Art Unit: 2629

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Shaheda A Abdin/ Examiner, Art Unit 2629 11/18/2010

/Quan-Zhen Wang/ Supervisory Patent Examiner, Art Unit 2629